

Wyoming Department of Agriculture Analytical Services



Laboratory Service Fees



Effective Date

November 1, 1999

Revised:

March 23, 2005

Quality Science for Agriculture, Health and the Environment



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Analytical Services
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GENERAL BACKGROUND FOR THE FEE INCREASE

Analytical Services (the State Chemist's Laboratory) is authorized by statute to make its analytical services available to the general public at a reasonable cost. The statute further states that these fees shall be comparable to those charged by commercial laboratories operating within Wyoming providing the same types of service. In order to meet this requirement we are raising the fees we charge for our analytical services effective **November 1, 1999**.

The last fee increase occurred January 1, 1992. The fees we charge, as well as being comparable, must also reflect the actual cost of the analyses performed. Many changes transpired in the last 8 years, which have driven up the cost of the analysis. Some of these factors are:

- **The prices for reagent chemicals, solvents and laboratory supplies have increased.**
- **The increased quality assurance requirements imposed on the laboratory by federal certifying authorities have dramatically increased the cost of making each analysis. Additionally, required audit samples were furnished for no charge by the certifying agency and now must be purchased, at considerable expense, by the laboratory from the private sector.**
- **The cost of analytical instrumentation has actually declined in some cases but maintenance costs and the consumables they require, such as sample vials, graphite tubes, pump tubing, source lamps, columns, etc., have taken some large increases.**
- **Consumer demands for better reproducibility and lower detection limits have further increased the costs of analysis.**

These factors effect all analytical laboratories and the fees they must charge for their services. Every attempt has been made to keep our service analysis fees as low as possible while meeting the requirements of state statute.

USING THE FEE SCHEDULE

The first section of the fee schedule lists the analyte fee by program and test. This is the fee, which would be charged to analyze a single sample for that specific analyte plus any applicable sample preparation charge. The second section lists the fees for specific analytical packages and the analyses included. When a single sample is submitted for several analyses the approximate service fee may be calculated by adding the individual fee for each analyte plus sample preparation, if applicable, and multiplying the total by 0.8. If for example a forage sample was submitted to the lab for protein, fat, crude fiber and carotene analysis the fee would be calculated as follows:

Sample Preparation	\$ 8.00
Protein	14.00
Fat	12.00
Crude Fiber	17.00
Carotene	18.00
TOTAL	\$69.00
	X 0.8
Analysis Fee	\$55.00

This routine will work in all analytical programs except water and pesticide residue analyses.

The laboratory should always be contacted prior to sampling for price quotations, verification of services and special sampling instructions. A quality analysis requires a quality sample. Contact the Analytical Services Lab at (307)-742-2984.

PROGRAMMATIC INFORMATION

PESTICIDE RESIDUE ANALYSES

The laboratory should **always** be contacted prior to sampling for pesticide residue analysis to ascertain the laboratory's capability for the pesticide residue of interest and to obtain information on pricing and sampling.

Always contact the laboratory prior to sampling or submitting samples for pesticide residue analysis.

METAL ANALYSES

The laboratory utilizes four methods for determining metals in all samples and while we have the capability to determine most of the elements, the capability is not the same for each technique. The methods are all based on the various atomic spectroscopy techniques and they all have different detection limits, linear dynamic working ranges, abilities to correct for interferences and costs. We will select the method, which is appropriate for the sample, **unless you contact the lab prior to sample submission.**

WATER MICROBIOLOGY

Water samples analyzed for total coliform will be billed at the rate of **\$12.00** per sample. Samples which test positive for total coliform will have fecal coliform determined and both results will be reported at no additional cost.

FAX TRANSMISSION OF RESULTS

If requested, the laboratory will **FAX** your analytical report at the rate of **\$2.00** for up to three pages of the report, excluding the cover page. Each additional page of the report will be billed at \$0.25 per page. The official final report will still be sent to you via first class mail.

QUALITY ASSURANCE/QUALITY CONTROL

This laboratory routinely performs duplicate analyses, the analysis of quality control samples and maintains a quality assurance program, which meets the requirements of various certifying authorities, such as the USDA, the USFDA and the USEPA. These procedures and the associated records may be inspected upon request and by appointment. Our analytical reports **do not** normally include QA/QC information.

If you require QA/QC data with your analytical report or if you know the sample will be part of any litigation, requiring chain-of-custody documentation, please communicate your requirements to the laboratory prior to sample submission. The fee for providing non-routine QA/QC and providing written documentation along with the analytical report will be determined on a case-by-case basis, however such fees will be in the range of \$50.00 - \$500.00.

MULTIPLE SAMPLE DISCOUNTS

Discounts will be given for multiple samples requiring the same series of analytes, when the samples are submitted at the same time by a single submitter. These discounts are as follows:

Number of samples submitted	Discount
5 or less	NONE
6 - 10	5%
11 - 20	10%
21 or more	15%

This discount is in addition to any other discounts based on the sample and the combination of analytes.

The laboratory must be contacted prior to sample submission to receive this discount.

PREPAYMENT DISCOUNT

This discount applies **ONLY** to an individual who submits an occasional sample or small batch of samples at a time on an irregular basis. If payment accompanies the sample the submitter is entitled to an additional **10%** discount, to be calculated after all other pricing considerations.

PREPAID ANALYTICAL SERVICE ARRANGEMENTS

These arrangements are designed for those customers who submit samples on a regular basis over an extended period of time for a specific set of analyses. These agreements require the **prepayment of all fees** for the analysis of all samples covered under the agreement. These arrangements can cover a time period of 6 months to 2 years and utilize the lab's unified collection and analysis report. If an agreement of this type meets your requirements for analytical services, **contact the laboratory**. The potential exists for some significant savings and shortened analysis times.

ANALYSIS TIME

The staff at Analytical Services analyzes samples as quickly as possible, however there are many factors to consider when judging analysis times. The major factors influencing analysis times are the highly variable number of samples we receive, the fixed size of our professional staff and the type of samples we receive (official regulatory samples vs. service samples).

Regulatory samples have priority over service samples, however processing of all samples is fairly continuous. Samples, which have an effect on public health, have priority over all other samples. These samples are followed, in priority, by samples effecting livestock health. Beyond these constraints, samples are processed on a first-in first-out basis.

Analytical Services has a fixed number of employees, which limits our ability to respond quickly to large influxes of samples. When sample submissions increase dramatically, as is usually the case between April and September, analysis times are longer.

Many factors influence the analysis time of your sample, including: the way we batch analyses, the type of samples, the number of samples already in the lab when your sample is received, the day of the week your sample is received and the number of determinations which must be performed on your sample. Our **goal** is to have the analysis of all samples completed within **one month** of sample receipt. Analysis times range from a few days to as long as six months but in **Fiscal Year 1999 Analytical Services completed the analysis of 84.1% of all samples within 1 month.**

You can help speed up the analysis process by:

- **Clearly communicating your analytical needs to the laboratory, when the sample is submitted.**
- **Submitting your samples between October and March, if possible.**
- **Shipping your samples to the lab early in the week.**
- **Contacting the lab prior to sampling or shipping if you have any questions at all.**
- **Including a daytime telephone number where you can be reached if we have any questions concerning your sample.**
- **Planning far enough ahead, so as not to place unnecessary or unrealistic demands on the lab.**

Occasionally emergencies arise and there is a legitimate need for rapid analysis of a sample. In these cases it is best to telephone the lab and advise them of the circumstances. This gives laboratory personnel time to schedule and prepare for the sample. If we are unable to meet your deadlines, we can advise you, thereby not wasting valuable time.

Good communications will help both you and the laboratory realize our respective goals.

Single sample – Single Analysis Fees

ANTIFREEZE	UNIT COST
PH	\$2.00
Alkalinity, Reserve	\$11.00
Water	\$18.00
Spec. Gravity	\$8.00
FEED, FORAGE & GRAIN	
Sample Preparation	\$8.00
Proximate Analyses	
Ash	\$11.00
Fat, Crude	\$12.00
Fiber, Acid Detergent (ADF)	\$17.00
Fiber, Crude (CF)	\$17.00
Fiber, Neutral Detergent (NDF)	\$17.00
Lignin	\$21.00
Moisture	\$9.00
Protein, Crude	\$14.00
Protein from non-protein Nitrogen (NPN)	\$23.00
TDN est. from ADF	No Charge
Elemental Analyses	
Calcium	\$18.00
Iodine	\$33.00
Magnesium	\$18.00
Metals by Flame Atomic Absorption	\$18.00
Metals by Graphite Furnace Atomic Absorption	\$33.00
Metals by ICP Emission Spectroscopy	\$26.00
Phosphorus	\$18.00
Sulfur as SO ₄	\$21.00
Other Analyses	
Carotene, Beta	\$18.00
Cyanide	\$18.00
Drugs in Commercial Feeds (Fee Range) ^a	\$35.00 – 65.00
PH	\$2.00

Potassium Nitrate	\$20.00
Salt	\$23.00
Sugar as Invert	\$45.00
Vitamin A	\$45.00
FERTILIZER MATERIALS	
Sample Preparation	\$8.00
Major Nutrients	
Nitrogen	\$14.00
Phosphoric Acid, Available	\$23.00
Potash, Available	\$18.00
Sulfur as SO ₄	\$23.00
Trace Nutrients	
Metals by Flame Atomic Absorption	\$18.00
Metals by ICP Emission Spectroscopy	\$26.00
Other Analyses	
Solids: Total, air dried	\$8.00
Solids: Total at 105° C	\$12.00
Solids: Volatile at 550° C	\$15.00
INDUSTRIAL CHEMICALS	
Cresols	\$75.00
Pentachlorophenol	\$75.00
Polychlorinated Biphenyls	\$75.00
MILK, DAIRY, FOODS & MEAT	
Sample prep. for foods and Meat	\$8.00
Bacteriology	
Antibiotics & Inhibitors	\$9.00
B-Hemo Disease Prod Bacteria Screen	\$8.00
Clost. Perf.; foods	\$20.00

Coliform	\$12.00
Direct Smear	\$12.00
DMSCC	\$8.00
<i>E. Coli</i>	\$15.00
Pathogenic Organisms, (CONTACT THE LAB)	\$38.00
Phosphatase	\$9.00
Plate Count; (SPC, PI/SPC, APC, HPC)	\$12.00
Ring Test	\$4.00
Yeast/Mold Count	\$15.00
Chemical or physical Analyses	
Added Water	\$6.00
Adulteration; Qual. Tests ^a	\$15.00
Ash	\$11.00
Butterfat – Gerber	\$8.00
Butterfat – Mojonnier	\$23.00
Cassein, Ash & Salt	\$12.00
Extraneous Matter	\$21.00
Fat – Cereal products	\$23.00
Fat – Mojonnier	\$23.00
Fat – Soxlet extraction	\$12.00
Metals by Flame Atomic Absorption	\$18.00
Metals by Graphite Furnace Atomic Absorption	\$33.00
Moisture/Total Solids	\$8.00
Non-fat Solids	\$8.00
Phosphorus	\$18.00
PH; Foods	\$2.00
Protein; Crude; Foods	\$14.00
Sediment	\$12.00
Meat Chemistry and Physical Analyses only	
Ascorbates	\$45.00
Cereal	\$38.00
Corn Syrup Solids	\$53.00
Extenders; Qualitative	\$15.00
Fat; Soxlet	\$15.00
Milk; Non-fat dry; via lactose	\$45.00
Moisture; Total	\$12.00

Nitrates	\$15.00
Nitrites; Colorimetric	\$15.00
Phosphates	\$23.00
Protein; Crude Total; Meat	\$14.00
Salt; Titration	\$23.00
Soy Flour	\$30.00
Soy protein, Isolated	\$38.00
Soy Protein Concentrate	\$30.00
PETROLEUM PRODUCTS & NATURAL GAS	
Fuel Products	
Alcohol in gasoline	\$30.00
BTU content of natural gas or propane	\$75.00
Distillation	\$38.00
Flash point	\$11.00
Lead in gasoline	\$18.00
Sulfur	\$38.00
Water and Sediment	\$15.00
Lubricating oils, used	
Ethylene glycol (qualitative)	\$15.00
Abrasive material	\$30.00
PESTICIDE FORMULATIONS	
Single Component	\$53.00
Multiple Component	\$105.00
PESTICIDE RESIDUES (except water)	
Sample preparation	\$15.00
Organochlorine pesticides	\$150.00
Organophosphorus pesticides	\$150.00
Organosulfur pesticides	\$150.00
Organonitrogen pesticides, except carbamates	\$150.00
Chlorophenoxy herbicides, req. methylation	\$180.00

WATER, SLUDGES, SOILS & WASTE WATER	
Sample preparation for sludge, soils and total metals	\$15.00
Bacteriology	
Chlorine	\$8.00
Coliform, Fecal	\$12.00
Coliform; Total; MF, MPN or P-A	\$12.00
Heterotrophic Plate Count	\$12.00
ColiAlert	\$17.00
Anion analyses	
Alkalinity; Bicarbonate	{
Alkalinity; Carbonate	{ \$11.00
Alkalinity; Total as CaCO ₃	{
Cyanide	\$30.00
Chloride*	\$20.00
Fluoride*	\$20.00
Nitrates as N*	\$20.00
Nitrates + Nitrites as N*	\$20.00
Nitrites as N*	\$20.00
Phosphate, Ortho*	\$20.00
Sulfates*	\$20.00
Phosphate, Total	\$20.00
Sulfide	\$26.00
* F, Cl, NO₃, NO₂, PO₄ & SO₄	\$20.00
as a group or individually	
Cation and Metal^(a) analyses	
Boron	\$18.00
Calcium	\$14.00
Magnesium	\$14.00
Hardness by titration	\$16.00
Mercury by Cold Vapor atomic absorption	\$30.00
Metals by Flame Atomic Absorption	\$14.00
Metals by Graphite Furnace Atomic Absorption	\$24.00
Metals by ICPMS – 1 st 4 elements	\$40.00
Each additional element	\$ 5.00
Potassium	\$14.00
Silica	\$21.00
Sodium	\$14.00

Demand & Nutrient Analyses	
BOD, 5 day	\$21.00
COD	\$21.00
DOC	\$38.00
Nitrogen, Ammonia N	\$20.00
Nitrogen, Nitrates as N	{
Nitrogen, Nitrates + Nitrites as N	{ \$20.00
Nitrogen, Nitrites as N	{
Nitrogen, Organic N	\$20.00
Nitrogen, Total Kjeldahl	\$14.00
Phosphate; Ortho	\$20.00
Phosphate; Total	\$20.00
TOC	\$38.00
Physical analyses	
Color	\$9.00
PH	\$2.00
Solids; ROE; 180° C	\$8.00
Solids; by summation	Mo Charge
Solids; from conductivity	Mo Charge
Solids; Total Suspended	\$8.00
Solids; Volatile	\$15.00
Specific Conductance	\$2.00
Turbidity	\$9.00
Organic analyses (WATER ONLY)	
Acrylamide; HPLC	\$63.00
Carbamates Pesticides EPA 531.1	\$125.00
Chlorophenoxy herbicides, req. methylation – EPA 515.1	\$113.00
Detergent; Methylene Blue Act. Sub. (MBAS)	\$23.00
Diquat EPA 549.1	\$88.00
Endothall EPA 548.1	\$88.00
Ethylene glycol – qual.	\$31.00
Glyphosate EPA 547	\$125.00
Organochlorine pesticides – EPA 508	\$88.00

Organonitrogen pesticides, except carbamates – EPA 507	\$88.00
Organophosphorus pesticides	\$88.00
Organosulfur pesticides	\$88.00
PAH's EPA 550.1	\$150.00
Pentachlorophenol EPA 515.1	\$63.00
Petroleum Distillates; Head space; GC	\$88.00
Phenols; Colorimetric	\$31.00

Phthalate Esters EPA 525.1	\$125.00
THM, total EPA 502.2	\$100.00
THM, Total Max Potential EPA 502.2	\$113.00
VOC's by purge & trap, EPA – 502.2	\$125.00
Contact the lab prior to sampling to ensure analysis availability and sampling requirements.	

Notes:

^(a) The fees listed in the above table are for dissolved metals. For total metals which require acid digestion prior to analysis, **add \$35.00** per sample to the above fees.

PACKAGE PRICES and INCLUDED ANALYTES

FEED & FORAGE	
Series 1 – Protein; Crude, Fat; Soxlet, Fiber; Crude & Sample Prep.	\$33.00
Series 2 – Protein; Crude, Moisture, ADF & Sample Prep.	\$31.00
Series 3 – Protein; Crude, Fiber; ADF, Fiber; NDF & Sample Prep.	\$42.00
Series 4 – Potassium Nitrate & Sample Prep.	\$16.00
FERTILIZER	
Major ingredients - Nitrogen, Phosphoric Acid, Potash & Sample Prep.	\$41.00

GENERAL WATER PACKAGES		BILLABLE COST		PREPAID COST	
CODE	Water Analysis Packages & Analytes	with Coliform	without Coliform	With Coliform	Without Coliform
A	Water Supply Development Series - Ca, Mg, Na, SAR, K, Co3, HCO3, Cl, SO4, F, No2+NO3,, pH, Conductivity, Hardness, Corrosivity, TDS, Total Alkalinity, Cu, Fe, Pb, Mn & Zn	\$104.00	\$96.00	\$94.00	\$87.00
B	Water Supply Rural Health Series - Ca, Mg, Na, SAR, K, Co3, HCO3, Cl, SO4, F, No2+NO3, pH, Conductivity, Hardness, TDS & Total Alkalinity	\$70.00	\$62.00	\$63.00	\$56.00
C	Water Supply Property Transfer Series - Cl, F, NO2+NO3, SO4, TDS, Total Coliform & Conductivity	\$40.00	\$30.00	\$36.00	\$26.00
D	Water Supply Production Agriculture Irrigation Series – Ca, Mg, Na, SAR, K, Co3, HCO3, Cl, SO4, F, No2+NO3, Boron, pH, Conductivity, Hardness, TDS & Total Alkalinity	\$78.00	\$70.00	\$70.00	\$63.00
E	Septic Guard , Total Coliform, Heterotrophic Plate Count & Nitrates	\$20.00		\$1800	
F	Total Coliform	\$12.00		\$10.00	
G	Metals #1 by ICPMS – Ca, Mg, Ma, K, Be, B, Al, Si, Ti, V, Cr, Mn, Fe, Co Ni, Cu, Zn, As, Se, Sr, Mo, Ag, Sb, Hg, Tl, Pb, U	Dissolved \$115.00	Total \$145.00	Dissolved \$100.00	Total \$125.00
	Disinfection By-products – Oxyhalides, Haloacetic Acid & THM Analysis		\$170.00		\$155.00
	Disinfection By-products – Haloacetic Acid & THM Analysis		\$155.00		\$140.00

<u>WATER - SAFE DRINKING WATER ACT</u>	
Langlier Index – Hardness, TDS (ROE @ 180 C), Total Alkalinity & pH - (<u>NOTE: We must have the water temperature @ time of collection.</u>)	\$24.00
Inorganics Regulated #1 – Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury, Nickel, Nitrate, Nitrite, Selenium, Sodium, Sulfate and Thallium	\$210.00
Inorganics Regulated #2 – Aluminum, Chloride, Color, Corrosivity, Fluoride, Foaming Agents, Hardness, Iron, Manganese, pH, Silver, Total Alkalinity, TDS and Zinc	\$110.00
Lead & Copper – Public WS ONLY	\$38.00
Lead & Copper – Private Water Supplies r – <u>Requires a 1st & 2nd draw sample.</u>	\$76.00
Nitrates, Nitrites & total as N only for small PWS	\$16.00
Inorganic Anions - F, Cl, NO ₃ , NO ₂ , PO ₄ & SO ₄	\$20.00
Fluoride. – Dental health programs only	\$16.00
Trihalomethanes – Total – Chloroform, Dichlorobromomethane, hlorodibromomethane, Bromoform & Total THM's	\$100.00
Trihalomethanes – Maximum Potential (same analytes as above)	\$113.00
<u>DISCHARGE WATER</u>	
Series 1 – Influent/Effluent Pair - (2 Samples) #1 – BOD-5, TSS, pH & Fecal Coliform (effluent only)	\$44.00
Series 2 – Influent/Effluent Pair - (2 Samples) #2 – BOD-5, TSS, pH, Ammonia N & Fecal Coliform (effluent only)	\$50.00
Series 3 – Effluent only – Fecal Coliform, pH and TSS	\$14.00

SAMPLING and OTHER INFORMATION

Information on sampling, laboratory programs, interpretation of results and more at the laboratory's Internet site: <http://wyagric.state.wy.us/aslab/aslab.htm>